

APPENDIX



How to Access a UNIX/Linux Operating System

This appendix explains your options for accessing a computer running UNIX or Linux as its operating system. Typically, you access a UNIX/Linux system in one of these circumstances:

- You use a dumb terminal directly connected to a communications port on the UNIX/Linux system.
- You use your school's local area network to connect to a remote UNIX/Linux system.
- You use a dial-up connection to your Internet Service Provider (ISP) or school server, and then access a remote UNIX/Linux system.

If you use a dumb terminal to access a UNIX/Linux system, you only need to turn on the terminal and press a key on the keyboard. You then see a UNIX/Linux login prompt, where you can enter your user name and password and begin working immediately. If you use your school's local area network to access a remote system, you must first establish a Telnet session to the system. See "Using Telnet to Access a Remote System" for complete instructions. If you are using a dial-up connection to access a remote system through your ISP or school server, continue to the next section.

Using a Dial-Up Connection to Access a Remote System

This section gives detailed instructions on setting up a dial-up connection. If you are already dialing into an ISP or your school server, you can skip the next sections, dial into your ISP or school server, and then proceed to "Using Telnet to Access a Remote System."

Setting Up a Dial-Up Network Connection in Windows 95 and 98

This section lists the steps typically necessary for setting up a dial-up network connection in Windows 95 or Windows 98. After you configure the dial-up connection on your system, you may use your modem to dial into your Internet Service Provider (ISP) or your college account. If your ISP or college has provided you with different instructions, follow them instead of the steps listed here.

Note: These instructions assume that your modem is already installed in your computer.

Information You Need Before starting these steps, make sure you have the following information:

- The telephone number for the server to which you are connecting
- The user name your ISP or school assigned to you
- Your ISP or school account password
- The IP address of the server to which you are connecting
- The IP address of your DNS server
- The domain of the server to which you are connecting

If you do not know one or more of the items listed, contact your ISP or school technical support staff for assistance.

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You may also need your Windows 95 or 98 CD.

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Configuring Your System for Dial-Up Networking

The following steps are necessary to set up your system for dial-up networking.

To set up dial-up networking:

- 1 Click the **Start** button, point to **Settings**, and then click **Control Panel**.
- 2 In the Control Panel window, double-click the **Network** icon. You see a dialog box similar to Figure A-1. Make sure the Configuration tab is selected, as shown in the figure.

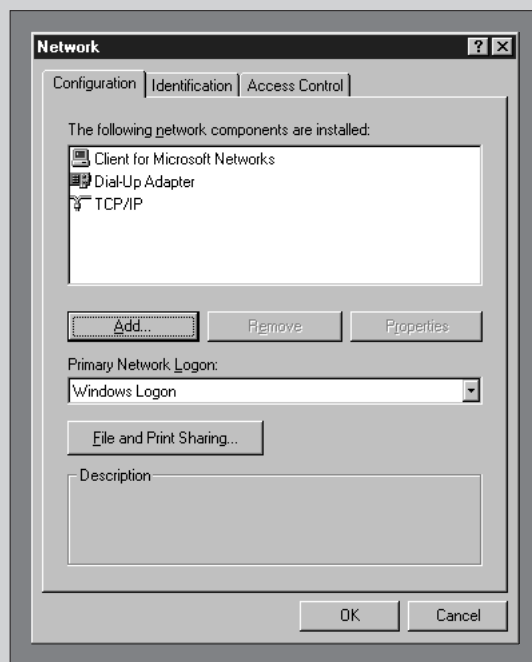


Figure A-1: Network dialog box

- 3 The Network dialog box lists the network components installed on your system. Network components are software, hardware, protocols, and services necessary to establish a network connection. You should see each of these components: Client for Microsoft Networks, Dial-Up Adapter, and TCP/IP. If all these components are listed, skip to the “Configuring Your System’s Network Connection.” If any are missing, you must install them by continuing to the next steps.
- 4 To install the client for Microsoft networks, click the **Add** button in the Network dialog box. You see the Select Network Component Type dialog box, shown in Figure A-2.

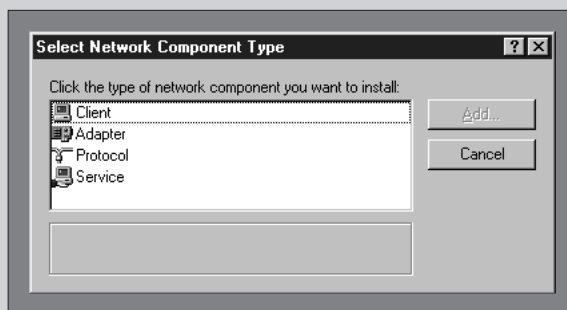


Figure A-2: Select Network Component Type dialog box

- 5 Double-click **Client**. You see the Select Network Client dialog box shown in Figure A-3.

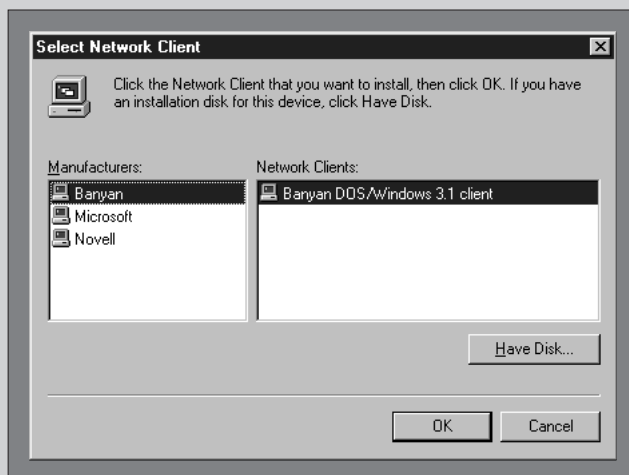


Figure A-3: Select Network Client dialog box

- 6 In the Manufacturers List, click **Microsoft**.
- 7 In the Network Clients list, click **Client for Microsoft Networks**.
- 8 Click the **OK** button. You return to the Network dialog box and see the Client for Microsoft Networks component listed.
- 9 To install the Dial-Up Adapter, click the **Add** button in the Network dialog box. You see the Select Network Component Type dialog box, illustrated in Figure A-2.
- 10 Double-click **Adapter**. You see the Select Network Adapters dialog box, similar to Figure A-4.
- 11 In the Manufacturers List, click **Microsoft**.
- 12 In the Network Adapters list, click **Dial-Up Adapter**.

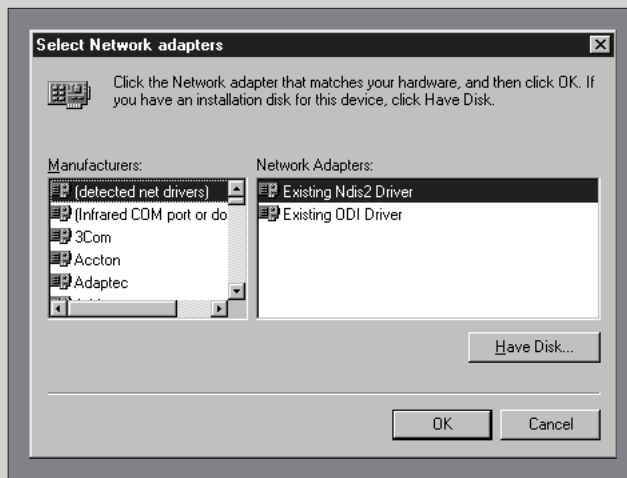


Figure A-4: Select Network Adapters dialog box

- 13 Click the **OK** button. You return to the Network dialog box and see the Dial-Up Adapter component listed.
- 14 To install TCP/IP, click the **Add** button in the Network dialog box. You see the Select Network Component Type dialog box illustrated in Figure A-2.
- 15 Double-click **Protocol**. You see the Select Network Protocol dialog box, similar to Figure A-5.

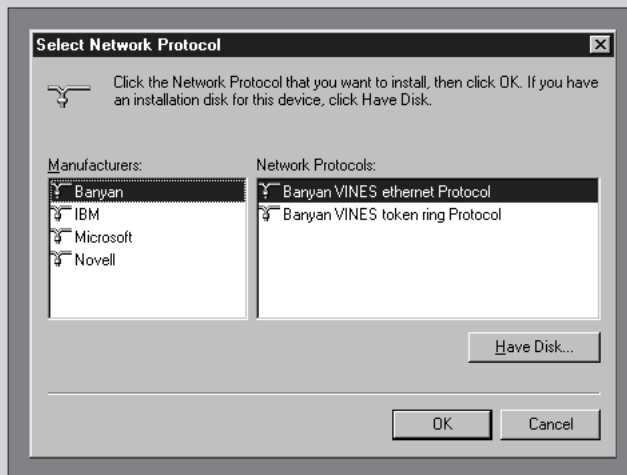


Figure A-5: Select Network Protocol dialog box

- 16 In the Manufacturers List, click **Microsoft**.
- 17 In the Network Protocols list, click **TCP/IP**. (You may have to scroll down the list to find it.)

- 18 Click the **OK** button. You return to the Network dialog box and see the TCP/IP component listed.

Configuring Your System's Network Connection

The following steps are necessary to configure your system's network connection.

To configure your system's network connection:

- 1 In the Network dialog box, double-click **Dial-Up Adapter** under the Network Components list. You see the Dial-Up Adapter Properties dialog box. Click the **Bindings** tab. The window should look similar to Figure A-6.

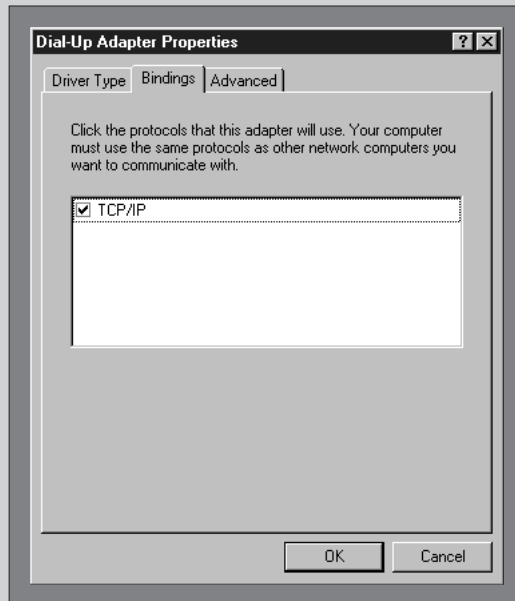


Figure A-6: Dial-up Adapter Properties dialog box, Bindings tab

- 2 Click the **TCP/IP** box to check it, if necessary. If you see other protocols listed, make sure they have no check marks next to them. If they do, click them to remove the check marks.
- 3 Click the **OK** button. You return to the Network dialog box.
- 4 In the Network dialog box, double-click **TCP/IP** under the Network Components list. If you see the TCP/IP Properties dialog box, click the **OK** button. Click the **IP Address** tab. The window should look similar to Figure A-7.
- 5 Confirm that the **Obtain an IP address automatically** option is selected. If not, click it to select it.

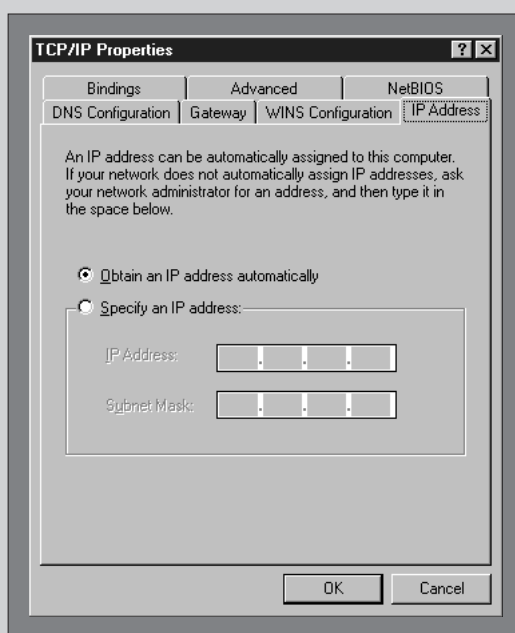


Figure A-7: TCP/IP Properties dialog box, IP Address tab

- 6 Click the **Gateway** tab. The dialog box looks similar to Figure A-8.

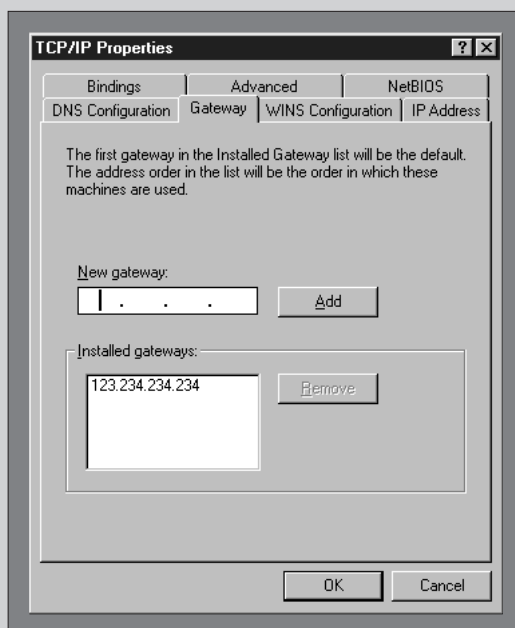


Figure A-8: TCP/IP Properties dialog box, Gateway tab

- 7** Click in the **New Gateway** text box, and type the IP address of the server you are connecting to. (Your ISP or school technical support staff must provide you with this address.) Click the **Add** button. The IP address you entered appears in the list of Installed Gateways.
- 8** Click the **WINS Configuration** tab. The dialog box looks similar to Figure A-9.

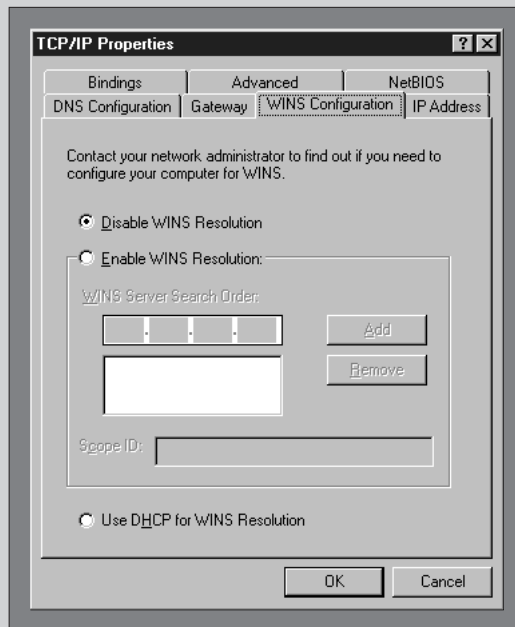


Figure A-9: TCP/IP Properties dialog box, WINS Configuration tab

- 9** Click the **Disable WINS Resolution** button to select it, if necessary.
- 10** Click the **DNS Configuration** tab. The dialog box looks similar to Figure A-10.
- 11** Click the **Enable DNS** option to select it.
- 12** If the **host** text box is empty, click it and type any name you want to give your local machine. (Usually, the name is unimportant.) In the **Domain** text box, enter the domain name of the server you are connecting to. This name will be similar to *campus.edu* or *course.com*. Your ISP or school technical support staff must provide you with the name.

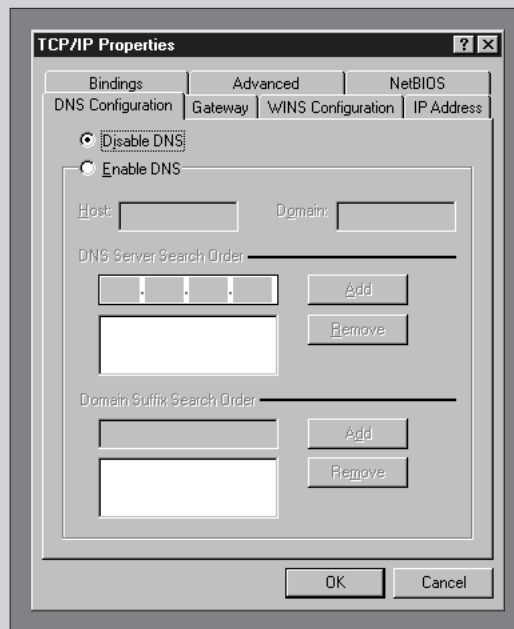


Figure A-10: TCP/IP Properties dialog box, DNS Configuration tab

- 13** Click in the **DNS Server Search Order** box, and type the IP address of the DNS Server you will use. Your ISP or school technical support staff must provide you with this information. Click the **Add** button next to the address you just entered.
- 14** Click in the **Domain Suffix Search Order** box, and enter the same domain name that you entered in the Step 12. Click the **Add** button next to the domain name.
- 15** Click the **OK** button. You return to the Network dialog box.
- 16** The **OK** button again. If you are asked for your Windows 95 or 98 CD, insert it in the CD-ROM drive and click the **OK** button.
- 17** After Windows installs the network drivers, you are asked if you want to restart your computer. Click the **Yes** button. Your computer restarts.

Installing Dial-Up Networking

The following steps are necessary to install dial-up networking.

To install dial-up networking:

- 1 After your computer restarts, click the **Start** button, point to **Programs**, and then point to **Accessories**.
- 2 If you see a **Communications** menu, point to it. If you see **Dial-Up Networking** on the Accessories or Communications menu, skip to the steps beginning with, “To set up a new connection.” Otherwise, you will need to install the connection from your Windows 95 or 98 CD. Continue to Step 3.
- 3 To install Dial-Up Networking, click the **Start** button, point to **Settings**, and then click **Control Panel**.
- 4 In the Control Panel window, double-click the **Add/Remove Programs** icon. When the Add/Remove Programs Properties dialog box appears, click the **Windows Setup** tab. A window appears similar to Figure A-11.

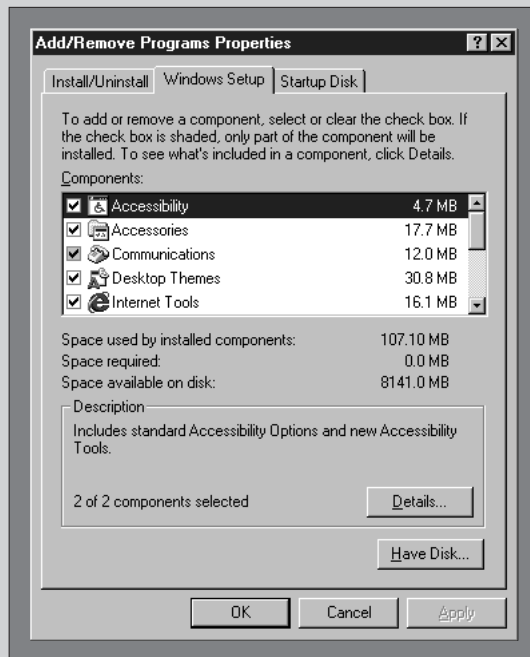


Figure A-11: Add/Remove Programs Properties dialog box, Windows Setup tab

- 5 In the Components list, click **Communications**. Then click the **Details** button. The Communications dialog box that appears is similar to Figure A-12.

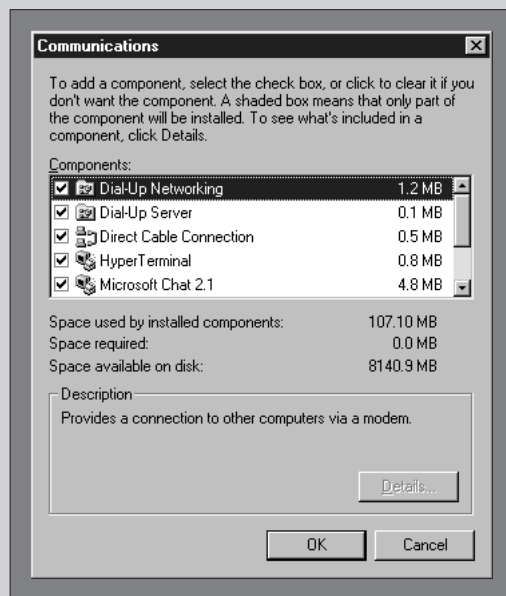


Figure A-12: Communications dialog box

- 6 Click the **Dial-Up Networking** box to check it, if necessary.
- 7 Click the **OK** button. You see the Add/Remove Programs Properties dialog box. Click the **OK** button. If you are prompted for your Windows 95 or 98 CD, insert it into the CD-ROM drive and click the **OK** button. Windows will complete the installation of dial-up networking.

Setting Up a New Connection

The following steps are necessary for setting up a new connection.

To set up a new connection:

- 1 Click the **Start** button, point to **Programs**, and then point to **Accessories**. Click Dial-Up Networking, if possible. If not, point to the **Communications** menu, and then click **Dial-Up Networking**.
- 2 Double-click the **Make New Connection** icon. The Make New Connection wizard opens, and you see a dialog box similar to Figure A-13.

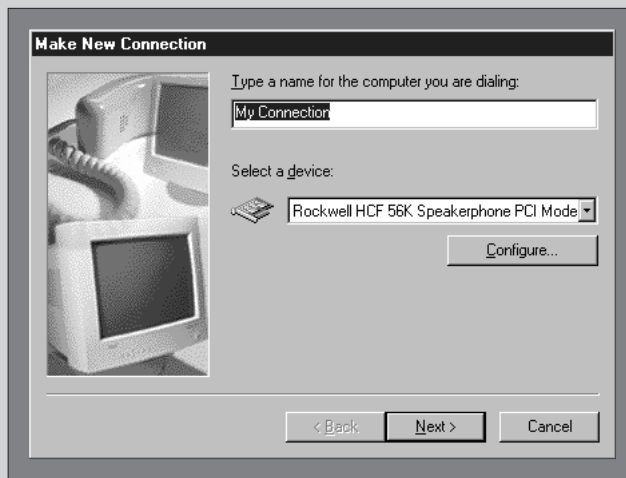


Figure A-13: Make New Connection wizard

- 3** Click in the box labeled **Type a name for the computer you are dialing**, and then type a description such as **My ISP Connection** or **My University Account**.
- 4** Be sure that your modem is selected in the **Select a Modem** text box. If not, click the **list** arrow, and then click the name of your modem.
- 5** Click the **Next** button.
- 6** In the **Area Code** and **Telephone Number** text boxes, type the area code and telephone number for the server you are connecting to. Be sure that the country you are in is selected in the **Country Code** text box. If not, click the list arrow and then select your country from the drop-down list. Click the **Next** button.
- 7** In the next dialog box, click the **Finish** button. You return to the Dial-Up Networking dialog box and see an icon for the new connection you just created.
- 8** Right-click the new icon and select **Properties** from the shortcut menu. The Connection Properties dialog box appears.
- 9** Click the **Server Types** tab. The dialog box looks similar to the one in Figure A-14.
- 10** Click the **Type of Dial-up Server** list arrow, and then click **PPP: Internet, Windows NT Server, Windows 98**. (If you are running Windows 95, click **PPP: Windows 95, Windows NT 3.5, Internet**.)
- 11** In the **Allowed network protocols** section, click the **TCP/IP** box to check it, if necessary. No other choices in this section should be checked.

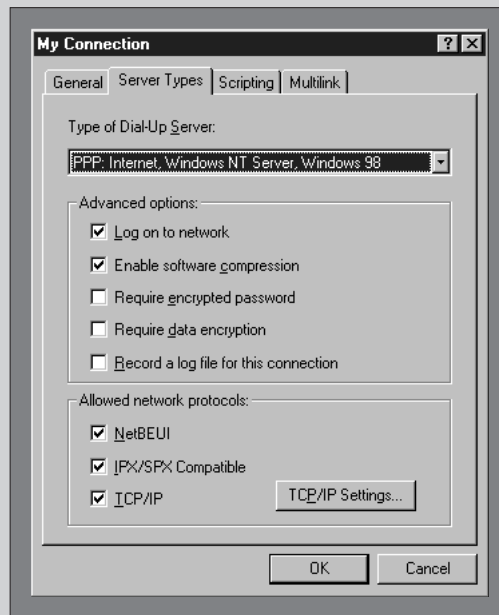


Figure A-14: Connection Properties dialog box, Server Types tab

- 12** Click the **TCP/IP Settings** button. The TCP/IP Settings dialog box, shown in Figure A-15, appears.

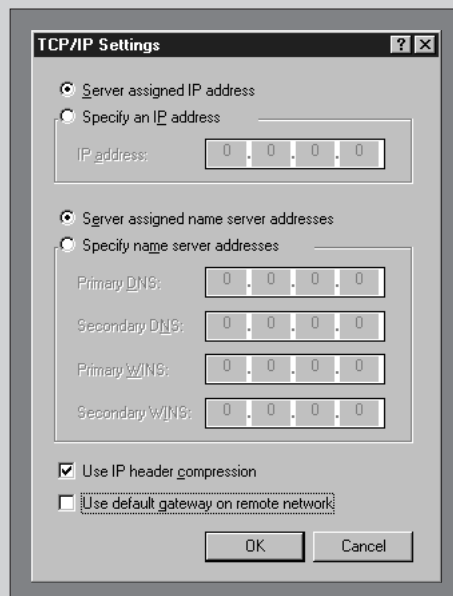


Figure A-15: TCP/IP Settings dialog box

- 13** Click the **Server assigned IP address** option button to select it, if necessary.
- 14** Click the **Specify name server addresses** option button to select it, if necessary.
- 15** In the **Primary DNS** text box, type the IP address of the DNS server you will use. Your ISP or school technical support staff must give you this information. The Secondary DNS, Primary WINS, and Secondary WINS text boxes should read 0.0.0.0.
- 16** Click to check the **Use IP header compression** and **Use default gateway on remote network** boxes, if necessary.
- 17** Click the **OK** button to close the TCP/IP Settings dialog box. When you return to the Connection Properties dialog box, click the **OK** button.
- 18** You are now ready to connect. Double-click the connection icon you created in Step 7. The Connect To dialog box, similar to Figure A-16, appears.

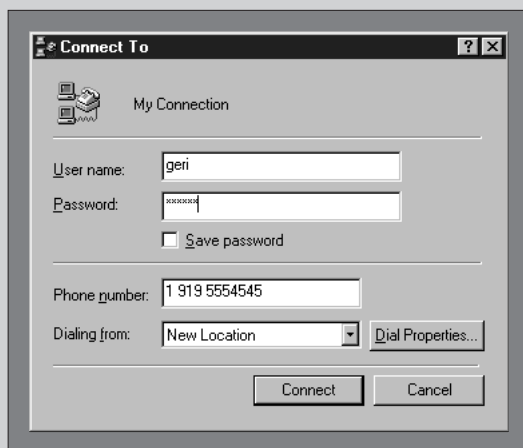


Figure A-16: Connect To dialog box

- 19** Enter your user name in the User name text box. In the Password text box, type your password, and then click the **Connect** button. The connection process begins, which may take a minute or more.

After you connect to the remote server, you can use your Telnet client to log on to a UNIX/Linux system. Continue to the next section, “Using Telnet to Access a Remote System,” and follow the steps to establish a Telnet session.

Using Telnet to Access a Remote System

After your computer is connected to your school’s local area network or has a dial-up connection to a remote server, you can use the Telnet program to log on to a UNIX/Linux system.

Information You Need

Before starting these steps, make sure you have the following information:

- The server and domain name of the UNIX/Linux system you want to log on to or the system's IP address
- Your user name and password on the UNIX/Linux system

To establish a Telnet connection:

- 1 Click the **Start** button and then click **Run**.
- 2 In the Run dialog box, type **telnet** and click **OK**. The Telnet window appears, as shown in Figure A-17.



Figure A-17: Telnet window

- 3 Click **Connect** on the menu bar, and then click **Remote System**. The Connect dialog box appears, as shown in Figure A-18.

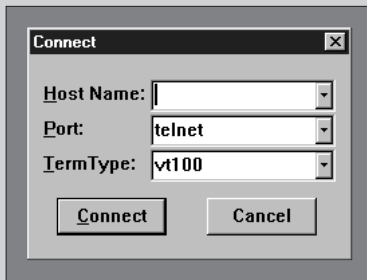


Figure A-18: Connect dialog box

- 4 In the Host Name text box, type the server and domain names. For example, *zeus.campus.edu* specifies the server *zeus* in the domain *campus.edu*. As an alternative, you can type the server's IP address in the host name box.
- 5 Click the **Connect** button. You see a login prompt, similar to Figure A-19.

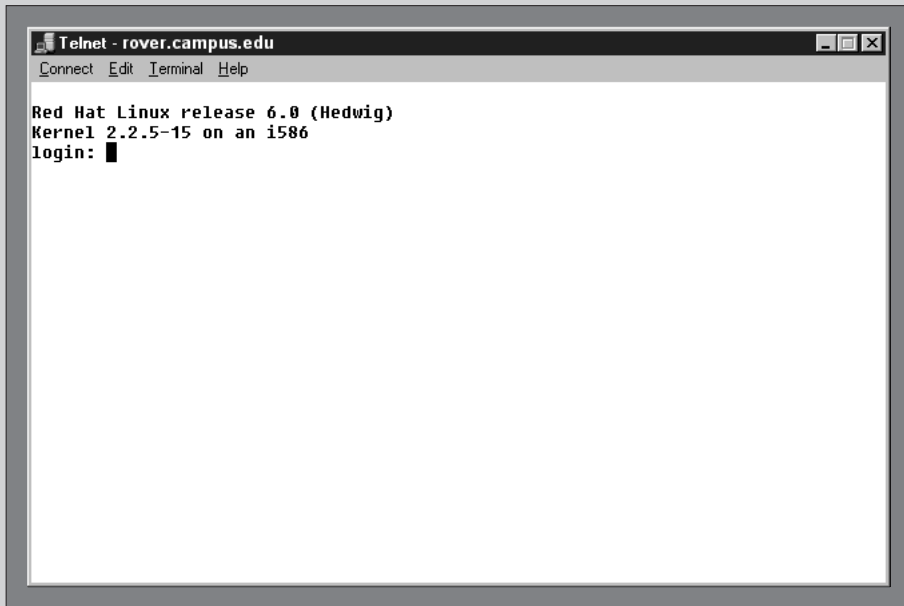


Figure A-19: Remote login prompt

- 6 Type your user name and password to log on to the system.
- 7 When you finish your session, click **Connect** on the menu bar, then click **Exit**. The Telnet program ends your session and closes.